

# TYPE APPROVAL CERTIFICATE

This is to certify that the undernoted product(s) has/have been tested in accordance with the relevant requirements of the DNV GL Type Approval System.

Certificate No.	<b>59 792 - 13 HH</b>
Company	<b>AUMA Riester GmbH &amp; Co. KG</b> <b>Aumastrasse 1</b> <b>79379 Müllheim, GERMANY</b>
Product Description	<b>Globe valve actuators (Parallel, Profibus-DP or Modbus)</b>
Type	<b>SVC 05.1 – SVC 07.5</b> <b>SVCR 05.1 – SVCR 07.5</b>
Environmental Category	<b>D, G, EMC 2</b>
Technical Data / Range of Application	<b>Torque range, Adjustable in 8 steps:</b> - SVC/SVCR 05.1: 10 – 25 Nm - SVC/SVCR 07.1: 20 – 50 Nm - SVC/SVCR 07.5: 40 – 100 Nm  <b>Output speed, adjustable in 9 steps:</b> - SVC/SVCR 05.1: 1.6 – 22 rpm - SVC/SVCR 07.1: 1.6 – 22 rpm - SVC/SVCR 07.5: 0.6 – 8.0 rpm  <b>Enclosure protection: IP68</b>  <b>Technical details are listed on page 2 and 3.</b>
Test Standard	<b>Guidelines for the Performance of Type Approvals Chapter 2, Edition 2003</b>
Documents	<b>Test report : According to TBV-11/003_Rev02, dated 2012-11-21,</b> <b>TBV-11/003_Rev03, dated 2014-09-30</b> <b>SW questionnaire acc. To requirement class 3: SW-D-AK3-P07-2009-10-23-</b> <b>EENoll.doc</b>
Remarks	<b>Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.</b>

Valid until **2020-03-05**

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**Features and functions of actuator:**

Motor: Variable speed, brushless motor  
Insulation class: F, tropicalized  
Motor protection: PTC thermistor  
Self-locking: Yes  
Turns per stroke: 1 – 24

**Limit switching (end position detection):**

- Via position transmitter potentiometer status signals for directions OPEN and CLOSE
- Signalling via fieldbus interface

**Torque switching:**

- Via electronic current measurement status signal for directions OPEN and CLOSE, adjustable in 8 steps
- Signalling via fieldbus interface

**Mechanical position indicator**

- Continuous indication, adjustable indicator disc with symbols OPEN and CLOSED

**Manual Operation:**

- Manual drive for setting and emergency operation
- Handwheel does not rotate during electric operation

**Features and functions of actuator controls:****Local controls:**

- Push buttons OPEN, STOP (LOCAL - REMOTE), CLOSE
- 2 indication lights: End position CLOSED (yellow), fault/failure (red), end position OPEN (green), operation mode LOCAL (blue)
- Local controls mounted on wall bracket

**Functions:**

- Switch-off mode adjustable:
  - Limit or torque seating for end position OPEN and end position CLOSED
- Torque monitoring over the whole travel
- Torque by-pass

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## Features and functions of actuator controls with ProfibusDP or Modbus:

Control: via fieldbus interface

Status signals:

- Via fieldbus interface

Positioner:

- Position setpoint via fieldbus interface
- Programmable behaviour in case of loss of bus communication
- Automatic adaptation of the dead band (adaptive behaviour selectable)
- Selection between open-close duty and modulating duty via fieldbus interface

## Features and functions of actuator controls with Parallel Control:

Control:

- Digital inputs
  - 4 control inputs for OPEN, STOP, CLOSE and EMERGENCY mode  
(if option "positioner" is chosen the input STOP or EMERGENCY is exchanged for MODE)
  - 1 Analogue input for setpoint control (0/4 – 20 mA) (Optional)

Status signals:

- 4 programmable semiconductor output contacts
- 2 NO contacts, default configuration: End position OPEN, end position CLOSED
- 2 NO contacts, default configuration: collective fault (torque fault, motor protection tripped), push button REMOTE
- Position feedback signal: Galvanically isolated analogue output E2 = 0/4 – 20 mA (load max. 500 Ω)

## Options:

- Positioner
  - Position setpoint via analogue input E1 = 0/4 – 20 mA
  - Programmable behaviour on loss of signal
  - Automatic adaptation of the dead band (adaptive behaviour selectable)
  - Selection between open-close duty and modulating duty via digital MODE input
  - EMERGENCY behaviour programmable:
    - Digital input low active, reaction can be selected: Stop, run to end position CLOSED, run to end position OPEN

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